



WHAT IS ECOPOTENTIAL?

Effective monitoring and analysis of the state and trends in ecosystem are fundamental to provide knowledge-based conservation, management and restoration policies. New monitoring and analysis methodologies are now available, combining approaches in geo and bioscience, Earth observation data, and *in situ* data. The ECOPOTENTIAL project, a European Horizon 2020 project started in June 2015, has been designed to reach significant progress beyond the state of the art on the understanding of ecosystem processes, functions and services. It involves experts and stakeholders from 47 institutions and staff from 25 protected areas.

INTEGRATING DISCIPLINES

ECOPOTENTIAL conceives ecosystems as "one physical system with their environment", integrating different disciplines and approaches.

INTEGRATING DATA

ECOPOTENTIAL uses Earth observations (both remote sensing and *in situ* data) for monitoring and modelling ecosystem functions and services in **25 protected areas** covering all the European biogeographic regions, plus a few non-European ecosystems, over a broad range of habitats, ecosystems and landscapes, including wetlands, arid and mountain ecosystems.

INTEGRATING APPROACHES

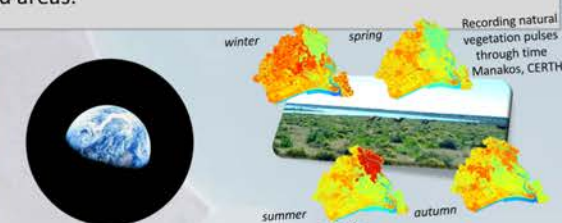
Scientists and Protected Areas staff identified the main ecosystem services, functions and processes, the threats and the conservation/management issues. The ecological challenges have been approached using a variety of tools and models to assess current and future ecosystem conditions, addressing long-term and large-scale ecological challenges and providing concrete products for improving Protected Areas management.

INTEGRATING VIEWS

ECOPOTENTIAL works with Protected Areas staff for defining the needs of future protected areas, and up-scales its results to broader scales. Science-policy interfaces are being generated to transfer scientific and technological knowledge into citizen information and policy strategies, aiming to improve management and conservation.

INTEGRATING PROGRAMMES AND INITIATIVES

ECOPOTENTIAL aims at creating a Community of Practice of data producers and users, working together with other international projects and initiatives and contributing to GEO initiatives as GEO ECO, GEO GNOME, EUROGEOS. ECOPOTENTIAL is building a Virtual Laboratory platform interoperable with the GEO Common Infrastructure, where data, results, models, tools will be available.



Surface air temperature in Gran Paradiso National Park (data downloaded from a Regional Climate Model) (E. Palazzi, S. Terzaghi, CNR)

